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ABSTRACT

This booklet addresses three questions about small schools, commonly posed by skeptics: "What do we really know about small schools?" What is there to recommend them?" and "Can we explain their track record?" With regard to the first question, large-scale studies compared the records of 300 students in 8 small New York schools prior to and after entrance; examined the records of 20,000 students in Philadelphia's public high schools, comparing small- and large-school student performance; and examined the test scores of 13,000 students in Alaska. Other studies involved nearly 12,000 students in 800 high schools nationwide. These studies consistently found that small-school students did better academically than did large-school students, and this was particularly the case for disadvantaged students; that size had more influence on student achievement than any other factor controllable by educators; and that the impact of size held at all grade levels, from elementary through high school. Besides positive effects on student achievement, small schools have much else to recommend them: at-risk students are more likely to achieve, there is less violence in school, students display more social concern, and dropout rates are reduced. This track record can be explained by small size, a nonconventional organizational structure, and a setting that operates more like a community than a bureaucracy. Smallness permits and invites a number of practices and arrangements recommended by educational research. Contains references in endnotes. (TD)

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Small Schools– A Reform That Works

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July, 1997

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The Small Schools Coalition is a collaboration of Chicago school reform organizations which address a broad range of school improvement and reform issues. The Coalition, which is led by BPI and LQE, enables the reform organizations to speak with one voice on small schools issues.

Business and Professional People for the Public Interest (BPI) is a 28-year-old Chicago public interest law and policy center whose "Small Schools Project" has for a half dozen years sought to foster and strengthen small schools in the Chicago Public School system.

Leadership for Quality Education (LQE) is a business-backed organization working to improve educational outcomes in the Chicago Public Schools, with a major focus on the support of the small schools movement in Chicago.

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Introduction

In a now-famous passage, the 1983 *Nation at Risk* report of the National Commission on Excellence in Education reported that the quality of American education was so poor that had it been imposed by a foreign nation it would have been deemed an act of war.

States responded with serious efforts to improve public schools—stricter graduation requirements, higher teacher salaries, competency tests for teachers, and the like. However, by the end of the 1980s we had little to show for these reforms. Overall, according to the National Conference of State Legislatures, despite much effort and lots of money, "seventeen-year-olds are learning no more today [1992] than 20 years ago," and student achievement in America was too low even for today's computer-driven economy, let alone what the country would need in the next century.

How could we do better? A second wave of reform, called "restructuring," was based on two related policy themes. First, centralized bureaucratic systems that focus on rules and procedures do not achieve desirable results. Second, every school is unique—a combination of personalities, relationships, and physical circumstances that need continual fine-tuning—and therefore each school requires a large measure of "on-site" control.

School-based management, or SBM, is the most widely practiced second-wave technique. The basic concept involves devolution to the school level of some authority previously tightly held by the central office respecting instruction, budget, personnel, and school organization. Usually the devolution is to a school council that includes the school principal, representatives of teachers and other school staff, parents, and sometimes the community.

Yet SBM by itself has also encountered formidable obstacles. After a year of SBM, Montgomery County, Maryland, voted authority back to the district. After 10 years SBM in Edmonton had produced no change in pupil test scores. Dade County, Florida, often viewed as one

of the most successful SBM systems in the country, found that "students in its SBM schools perform no better than students in regular schools."

Whereupon a modified second wave strategy, "small schools," has begun to gain prominence. Building on the strength of SBM's devolution of authority to the school level, the small schools strategy focuses on what should be done with the devolved authority. The small schools answer: create a personalized learning environment, not just through SBM but through downsizing the school and related "personalizing" measures, such as a self-selected faculty that chooses to come together because of a shared educational vision. In recent years a growing body of research has begun to make it clear that small schools (loosely, up to 300 students in elementary schools, 600 in high schools), not big ones, provide the kind of environment within which learning can best take place.

In this occasional paper, Mary Anne Raywid, Professor Emerita of Hofstra University and a long-time thoughtful observer of small schools, provides an up-to-date look at this research and reflects on the small schools movement. The Small Schools Coalition, BPI and LQE are pleased to offer this contribution to the ongoing dialogue on improving public education.

Small Schools Coalition
Business and Professional People for the Public Interest
Leadership for Quality Education

Mary Anne Raywid has specialized for the last 20 years in school reform and restructuring. She has authored more than 200 articles related to such efforts, and has been connected with school improvement and innovation in the several roles of consultant, developer, researcher, and evaluator. This examination of the research on small schools is but one of a series she has published, summarizing the research on focus schools, alternative schools, and public schools of choice. Dr. Raywid is Professor Emerita of Education, Hofstra University, Hempstead, NY, and is currently a member of the Graduate Affiliate Faculty of the College of Education at the University of Hawaii at Monoa.

SMALL SCHOOLS – A REFORM THAT WORKS

Mary Anne Raywid

The urgent need for urban school improvement continues to inspire reform proposals. Chicagoans wanting further evidence of such need surely found it in the 1995 teachers' assessment of the Chicago high school. The teachers' story was one of "low student attendance, poor engagement in learning, and weak academic achievement." It also revealed devastating work environments and "large numbers of demoralized staff."[1] Then, the upshot of the subsequent report, on the student perspective, was that Chicago's high schools are "organized for failure" – and conditions within them are unlikely to improve, short of "broad-based changes."[2] Thus, solution proposals keep pouring in. The more popular ones, those that are around for a while, tend to generate a full chorus of response, including skeptics and cynics as well as advocates.

The skeptics and cynics are being heard now on the small schools solution for Chicago. "What do we really know about them, after all?" they ask. And "What is there to recommend them?" And "Can we explain their track record?" The questions are healthy and positive in their insistence on evidence. But as will be shown, the answers to them add up, respectively, to "A great deal." "A lot." And "Yes."

WHAT DO WE REALLY KNOW ABOUT SMALL SCHOOLS?

Until fairly recently, much of the evidence often cited in support of small schools consisted of case studies of particular instances – the sort of evidence that skeptics could dismiss as unreliable or atypical, attributable to unique circumstances, or to a hero leader. Other studies, however, involving thousands of students and hundreds of schools, now make such dismissals impossible for any informed observer. Researchers are still producing useful and insightful case studies but these are not the major source of our knowledge of small schools. We

also have large-scale studies such as that comparing the experiences of 300 students in eight small New York schools with their own records prior to and after entrance;[3] and another examining the records of 20,000 students in Philadelphia's public high schools, comparing small school and large school student performance;[4] yet another examining the scores of 13,000 youngsters in Alaska;[5] others investigating the schools of entire states, and documenting the effects of school size;[6] and a growing number of studies based on the experiences of nearly 12,000 students in 800 high schools nationwide.[7]

There is an unusual consistency in the findings of these studies. The New York investigation found that small school students improved their own previous credit accumulation rates by 60%. The Philadelphia study concluded that high school students in small schools were more likely than those in large ones to pass major subjects and progress toward graduation.[8]

> On all indicators, ninth-grade ... [small school] ... students outperform their ... [comprehensive high school] ... peers by a statistically significant amount.... [They] ... have higher attendance, higher rates of passing major subjects, are more likely to earn enough credits for advancement and were less likely to have dropped out during the school year.... The differences between the two groups are quite substantial, ranging from 11 to 15 percentage points across nine distinct indicators of academic performance.

The Alaska study found that disadvantaged students in small schools significantly outperformed those in large ones on standardized basic skills tests. The studies of New Jersey and of an unidentified Western state showed that in the former, size had more influence on student achievement than any other factor controllable by educators, and in the latter, the larger the school, the lower the student scores in reading and mathematics. Finally, the national studies confirm conclusively that youngsters learn more in math, reading, history, and science in small schools than in large ones – especially disadvantaged students.[9]

> [R]esults ... demonstrate consistently and conclusively that students do better in smaller schools ... Students in smaller schools gain more in these important areas ... [mathematics, reading, history, and science]. These findings are net of differences in schools' academic and social character, as well as the academic and social characteristics of their students.

Moreover, findings about the impact of size appear to hold at all grade levels, elementary through high school – with a tendency for school size and organization to play a larger role as students get older.[10] The confidence with which small school advantages can be asserted grows steadily stronger since we are now getting a substantial number of compilations, or studies of studies, on the importance of size.[11] A recent compilation, examining 103 studies dealing with school size, observed that many of them find student performance in small schools superior to that in large ones, while *none* find the reverse to be true.[12]

Thus it cannot be said that we lack sufficient reliable evidence of the positive effects of school size on student success to act upon it. In fact there is enough evidence now – and of the devastating effects of large size on substantial numbers of youngsters – that it seems morally questionable *not* to act on it. Size could eventually prove, as the title chosen by one set of analysts suggested, "the ultimate educational issue."[13]

WHAT IS THERE TO RECOMMEND THEM?

In addition to the positive effects on student achievement, there is much else to recommend small schools. First and foremost, there is a fairly strong record as to which students are most penalized by bigness and which gain most from reducing school size. As long ago as the 1970s it was found that minority and lower achieving students seemed to do better in small schools.[14] As common sense would suggest, the generally advantaged students – those with affluent, educated and supportive families, and high ability levels – are less penalized by large schools than are their less fortunate peers of lower ability and/or from poorly educated, low income families. After all, the advantaged students are the ones who have been succeeding in school right along – big ones as well as small. There are some who find that high ability students from well-to-do homes may even

profit more from large schools than from small.[15] But if so, it is definitely *not* a situation in which what's best for the strongest students is best for all. Size has negative effects in low socio-economic settings that it does not have in high. For disadvantaged students – which includes a large percentage of Chicago's school population – small schools can offer by far the greatest benefits.

In small schools, otherwise "marginal" or at-risk students are much more likely to become involved, to make an effort, and to achieve.[16] As a result, such schools manage to reduce the well-established negative effects of race and poverty on school success. In doing so, they narrow the gap separating the school achievement levels of advantaged youngsters from those of the disadvantaged.[17] Whereas in large high schools success tends to be stratified along socio-economic lines, this does not hold for small ones.

Poverty and minority status have long been recognized as handicaps to school success, but neither can be addressed very directly by schools; yet what is frequently found to be the third major obstacle to success for disadvantaged students – large schools – clearly is within our control. The evidence suggests that the size of the school a youngster attends may even be as important to equity as the dollars and the staff the school is allotted!

Beyond this, major studies have documented that small schools are far more likely to be violence-free than large ones,[18] and that students are likely to be generally better behaved there.[19] Youngsters are also likely to be more involved, more satisfied, and less likely to drop out from small schools.[20] The connection is sufficiently strong that one set of researchers has even ventured a formula for calculating the increase in dropout rates predictable from specified enrollment increases.[21]

A different sort of indicator of effectiveness, but no less a vital one, is the kind of impact a school makes on an individual's life beyond its walls – and how long such influence lasts. This, of course, is really education's ultimate goal: to affect the attitudes and dispositions and capabilities of youngsters – in short, the kind of human beings and citizens they become. We want, in other words, "schools that make an

imprint."[22] It cannot happen if the school provides a weak normative environment. But a strong one takes a lot more than classes. It takes a special kind of place, of which size appears to be a governing attribute.

Smallness permits the sort of human connections that result in strong student-school bonds – enabling the school to affect youngsters' personal habits (such as smoking, alcohol, and drug use), their aspirations (such as life plans), and their post-high school behavior (such as college attendance).[23] The kind of influence a school can exert is seen in the aspirations of the East Harlem students attending Central Park East Secondary School, perhaps the nation's most famous small school: 80% finish high school. More than 90% of these then go on to college. What's more, early evidence suggests that virtually all who go will complete it.[24]

Less dramatically, but perhaps as important in its prospective implications, a study of a small, Long Island school-within-a-school found that the behavior of the small school students reflected more social concern and moral responsibility than that of youngsters in the larger, host school: the small school students displayed more concern for others, and were more committed to acting on principle, and to improving social institutions.[25]

Finally, small schools have not only yielded individual school and district successes; they have also produced new types and models of effective secondary education. The Metropolitan Learning Center in Portland, Oregon, for instance, is almost 30 years old. A small high school, it is open to students throughout the city and imposes no special entrance requirements. It attracts students interested in the arts. Several years ago it was reporting a dropout rate of 2%, while that of the district stood at 30%. The Center also had the highest per capita scholarship rate in the city.[26]

Pennsylvania's elaborate assessment program of several years ago enabled one small school, The Alternative Program in State College, not only to document its students' success – but to make claims about the "value added" by the school. Alternative Program students scored at the amazing level of the 99th percentile on 13 of the 14 areas assessed by the State. Obviously, the students were an able group – but statistical measures applied by the State determined that in more than half the areas tested, ability alone could not account for the high scores![27]

To cite another case, Nova is a small, 135-student, innovative high school in Seattle. Its students enter with academic records ranging from strong to very weak, and they come from homes ranging from affluent to poor. But Nova sends 85% of its graduates to college, and its students regularly average SAT scores at the very top of Seattle's high schools. Last spring, a new citywide writing assessment program declared 62% of Nova's eleventh-graders proficient, as compared to only 28% of the district's students. The school is also proud of its realism and accuracy in predicting college success. The University of Washington compares students' high school grades with their college grades as freshmen. It recognizes Nova with one of the highest grade credibility rates in the State.[28]

California's Career Academies are an example of a successful new genre of schools-within-schools. They focus on introducing students to an entire industry – with the help of resources in the community – as the youngsters pursue a college prep program. The Health and Media Academies in Oakland have become nationally known for their success in marshaling business collaboration in keeping minority, largely poor youngsters in school.[29] The Academy provides a new model for school-community collaboration by involving local business and civic organizations directly and extensively in educating young people. Figures from two of Oakland's academies show that in this community where dropping out of high school is the norm, most academy students successfully complete high school and then go on to college. Career academies, with their real world curriculum and work participation interwoven with academics, appear to represent a new model for engaging inner city youth in education, as well as a new model for school-community collaboration.

Small schools are also producing new models for addressing what has been a difficult and growing problem for many schools: how to deal with students who do not speak English. La Escuela Fratney, a small elementary school in Milwaukee, offers a model two-way bilingual program,[30] and New York's International High School has now inspired two or three other new small high schools in New York alone, which together represent a new model for secondary education. When they enter, International's students have been in this country less than

four years and they barely speak English. More than two-thirds come from families with below-poverty incomes. Yet 96% of them graduate from International and of these, an amazing 97% go on to college.[31]

International represents a modification of yet another model for secondary education which small schools have produced, the "middle college high school" model for at-risk youth. This version of secondary education was created more than two decades ago at LaGuardia Community College. It combines an emphasis for high school students on themed curriculum, extensive annual internships, and use of the college campus facilities, including its classes.

CAN WE EXPLAIN THIS TRACK RECORD?

There still isn't full agreement as to just which organizational features are most responsible for the success of small schools. That is variously attributed to a number of things: to the more human scale of such schools, to their more satisfied and willing students, to more committed teachers, to the choice opportunity such schools typically afford, to the fact that most of them have a focus or coherent mission, to their relative autonomy and distance from the bureaucracy, to heightened responsiveness to their constituents, and to a better school-student and school-family match. But irrespective of which of these features is most important, substantial agreement is emerging as to the centrality of three ingredients in producing them: (1) small size,[32] (2) an organizational structure departing significantly from the conventional,[33] and (3) a setting that operates more like a community than a bureaucracy.[34]

One reason why size appears so pivotal is that smallness *permits and invites* a number of practices and arrangements that have independently been found desirable. The result is that a fairly full package of currently recommended reforms is linked in one way or another to small schools. One kind of linkage is that small schools so comfortably accommodate so much from the lessons we've learned about school effectiveness.

First, we've learned that school organization matters.[35] Organization may be the major reason so many youngsters are more successful in the more personalized, non-departmentalized environment of the elementary school than in the high school. The way schools are put together structurally clearly affects student achievement,[36] and it

affects school attendance patterns[37] and dropout rates.[38] It also makes a bigger difference – matters a lot more – to disadvantaged students than to those who are not.[39] How a school is structured obviously depends on its size: the larger it is, the greater the need for organizing people into sub-units and specializations and the more fragmented the experience of teachers and students becomes.

Second, whether a school operates more as a bureaucracy or a community matters a great deal. It determines whether the staff see their job primarily as delivering services or whether they see it as succeeding in educating. It also determines whether teachers are grouped in departments and students in stratified (tracked) classes, or whether the two are grouped together in smaller units – small schools or schools-within-schools. Whether the model is bureaucracy or community has major consequences for the kinds of relationships teachers share with one another, the way they connect with students, and the way students interact with each other. Size is the key feature in permitting or denying the opportunity to make the school a community in which each individual is known and treated as such, or whether a depersonalized, rule-governed environment is necessary instead to keeping order.

Third, creating the sort of school organization which will stimulate and support success – schools that operate as communities – will require a lot of changes in most schools. And we've a long history to show that school change is extraordinarily difficult. The process of creating small schools, or schools-within-schools, may be the most promising means yet devised for actually bringing about effective change. We've finally learned the lesson pointed out some years ago, that to effectively change anything in schools, you've got to change a great deal. The result is that making even a small change effective is often a matter of restructuring, not just of improvement or reform. (*Not* acknowledging this may be a major explanation for reform failures over the years.) But restructurers have concluded that starting a new school may be far easier than re-fashioning an existing one. Hence some see the establishment of small schools, or schools-within-schools, as our best response to the challenge of what to do with failing schools – or even with schools needing more modest improvement.

Fourth, there appears to be almost a natural sequence – a logical progression – taking the small schools that are adequately supported from one item on the contemporary reform agenda to the next. For instance, a small teaching staff with the collective responsibility of designing a distinctive program is stimulated to do the kind of collaborating so strongly now recommended: to pursue continuing examination together of what works and why, and what needs to be avoided. In the course of creating their own school and program, they become a strong professional community. They have also shared the kind of experience that builds the teacher ownership and commitment often missing in large high schools. With the stimulation and mutual assistance that are involved, they are able to plan the sort of work for students that youngsters can find relevant and significant, "authentic" learning. At the same time, the reduced scale is also permitting teachers to establish different relationships with students. They can personalize their interactions and tailor assignments to individuals. Although such a progression is not assured, and small schools cannot guarantee it, their track record recommends them as the most hospitable and conducive setting for it that we know.

A POSTSCRIPT

The longer and harder we work at school reform, the clearer two lessons become. First, there is no magic bullet – no single practice which by itself has the power to transform a failing student or school into a successful one. Be suspicious of anyone who tells you otherwise, irrespective of what he or she is proposing – be it smaller schools, school choice, direct instruction, or a demanding curriculum. Single-factor solutions aren't solutions.

The second lesson our efforts have taught us is that there is no fail-safe solution – no sequences or strategies that are guaranteed to work. The problem isn't limitations in our knowledge. It's in the nature of the case that there is nothing – no single thing, no practice or arrangement – that works under any and all circumstances.

There appear to be at least two reasons why this is so, rendering fruitless the search for simple, guaranteed solutions. The first is that successful education is context-specific: what works under one set of circumstances fails under another. What succeeds with one child, or in one community, won't necessarily do so in another.

The second reason no one has come up with the long-sought magic bullet or the fail-safe solution for education is that successful schooling has so many components: it requires not just one practice or arrangement but many in order to make a school succeed. Thus, to try to improve schools with the introduction of a single practice may leave multiple self-defeating practices in operation – no matter how great the potential of the new idea. This has been the sad fate of numerous promising reforms.

That said, there is some good news. The accumulating, now substantial evidence tells us that small schools offer a setting that can accommodate and build in much of what educational research is recommending. They provide a promising reply to many of the questions that plague us, such as, How can we get effective change? and How can we make schools work for at-risk students?, and they offer what is perhaps our most promising single strategy for realizing a number of the goals of current reformers – including new governance and accountability arrangements, personalization and individualization, strong professional communities, authentic instruction and engagement, and genuine and lasting achievement for a great many more youngsters.

* * *

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